Practitioner's Docket No. KLR: 7146.017

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#13
KD
8-15-01

Applicant : Gillihan, Thomas	Group Art Unit: 2722
Serial No.: 09/128,580	Examiner: Popovici, D.
Filed : 08/04/98	

Title : PRINTER CONTROLLER FOR ERROR RECOVERY WITH MULTIPLE LANGUAGE CAPABILITY

Chernoff, Vilhauer, McClung & Stenzel, L.L.P.
1600 ODS Tower
601 SW Second Avenue
Portland, Oregon 97204
Telephone No. (503) 227-5631
FAX No. (503) 228-4373

August 3, 2001

RECEIVED

AUG 1 0 2001

Technology Center 2600

Assistant Commissioner for Patents
Washington, DC 20231

REPLY BRIEF ON BEHALF OF APPELLANTS

Dear Sir:

REPLY

This is in reply to the Examiner's Answer of June 4, 2001 (Paper No. 12) to the appellants' Appeal Brief of September 25, 2000. The Answer restates the grounds for final rejection and offers several responses to arguments put forth in the appellants' Appeal Brief. The appellants believe that the "Responses to Arguments" of section 11, subsections A) - E) of the Answer, are related to the issues raised in the Brief as follows:

-1-

Response to Arguments (11)A) (pages 11-14)

I.A. Are claims 1 - 9 patentable under 35 U.S.C. 102 over Pavlovic et al. U.S. Patent
No. 5,715,379 (Pavlovic)?

Claim 1 and dependent claims 2 - 9 relate to a print engine comprising a plurality
of processes. In the claimed print engine a second process (a "PDL (printer description
language) determination process") that selects a suitable third process (a "parsing
process") to parse a document does not terminate prior to the initiation of the parsing of
the document by the parsing process. The appellants assert that this is a feature
distinguishing the claimed print engine from prior art print engines of record where a
PDL determination process terminates after the PDL of a document has been identified
and before the parsing is initiated. The appellants assert (Appellants' Brief, page 5)
that to anticipate under 35 U.S.C. 102, "the reference must teach every aspect of the
claimed invention, either explicitly or implicitly" MPEP 706.02(a) and that Pavlovic does
not teach, explicitly or by implication, a print engine in which a PDL determination
process does not terminate prior to the initiation of parsing of the document.

In apparent response (Answer, page 12), the Examiner first restates the rejection
including the conclusion that Pavlovic teaches "(e) the second process (decomposition
facility 110 and see column 4, lines 36 - 43) not terminating prior to selected third
process initiating the parsing of the document." The Examiner offers no basis for this
conclusion except for the parenthetical reference to the following portion of Pavlovic
(column 4, lines 36 - 43):

> In order to determine which particular decomposer is required for a
> particular set of data, either different required decomposition facility can
> be specifically called into action by use of "guessing" algorithms
> associated with some controller of the decomposition facility 110. Such
> "guessers," such as detecting "%!" commands to identify PostScript files
> are known in the art.

The appellants assert that this is the only reference in Pavlovic to the PDL
determination process and its relationship to the parsing process ("decomposition" in
Pavlovic) and submit that the quoted portion neither explicitly nor implicitly suggests

-2-

that the second (PDL determination) process does not terminate prior to the initiation of the third (parsing or decomposition) process as it does in all prior print engines.

With prior art print engines, the PDL determination process terminates before the parsing is initiated for the document but the parsing process may terminate signaling the control to restart the PDL determination process to search for another synchronization code if the print engine determines that the file is corrupted (Application page 7, line 36 - page 8, line 8). The examiner has orally suggested and appears to assert (Answer, page 13 and 14) that restarting the PDL determination process at an intermediate location within a document justifies a conclusion that the "PDL determination process (is the second process) is not terminating prior to the selected third process (decomposers 110a, 110b, 110c, or 110d (referencing Pavlovic)) initiating the parsing of the document." However, the appellants submit that the act of restarting the PDL determination (second) process at a point within the document means that the PDL determination process had been previously terminated and nothing of record contradicts the assertion that, if terminated, the termination occurs prior to initiation of parsing. Likewise, restarting the PDL determination process is not an indication that it will not again be terminated prior to the reinitiation of parsing and the examiner offers no basis for a contrary conclusion.

The examiner also refers (Answer, page 13) to figure 3 and column 7, lines 10-27 of Pavlovic as supporting a conclusion that the PDL determination process of Pavlovic does not terminate prior to the initiation of parsing of a document. The referenced portion of Pavlovic describes a method of printing a job comprising four portions or "tasks," which are to comprise a single printed document. Each "task" is an individual file (column 8, line 3) or document encoded in a single PDL (application page 7, lines 28-32) and at least two of the documents have different PDLs. According to the examiner, "while PDL determination process may identify the ASCII file 1 (a first file), decomposer 110a may decompose the PS file 1 (a second file)" justifying a conclusion that "the second process (decomposition facility 110 and PDL determination process see column 4, lines 36-43) not terminating prior to the selected third process

-3-

initiating the parsing of the document." The applicants submit that Pavlovic refers only to the simultaneous operation of a plurality of "decomposition facilities" or parsing processes ("each independent decomposer has the function of processing input data according to a specific PDL or other format" (column 4, lines 28-32)) and not to a simultaneous operation of a parsing process 110 and a PDL determination process. The applicants further submit that Pavlovic does not indicate the manner of operation of the "controller of the decomposition facility" when multiple files or documents are to be printed either as separate printed documents or as a single printed document. Simultaneous parsing or simultaneous printing of a plurality of documents, as suggested by the examiner, does not imply that the process that identifies the PDL of a document continues to examine that document while it is parsed (claim 1). Nothing in Pavlovic suggests that the "controller of the decomposition facility" can simultaneously apply the guessing algorithms to a plurality of documents so that the PDL determination process can proceed during simultaneous parsing of a plurality of documents.

The examiner (pages 13 and 14 of the Answer) also comments on advantages of simultaneous operation of the decomposition facilities 110 a-d of Pavlovic. However, the appellants assert the advantages of simultaneous parsing of a plurality of documents are irrelevant to a determination of whether each aspect of the print engine of claim 1 is explicitly or implicitly taught by Pavlovic.

The Examiner has rejected claim 9 under 35 U.S.C. 102 as anticipated by Pavlovic but admits in the Answer (page 21) that Pavlovic does not teach an element of the claimed print engine. The appellants submit that rejection for anticipation requires that the entirety of the claimed invention be found in a single prior art document and that rejection on the basis of 35 U.S.C. 102 is therefore improper.

The appellants submit that Pavlovic does not anticipate claims 1-9 because Pavlovic does not explicitly or implicitly teach a print engine including all of the limitations of independent claim 1 and, therefore, the limitations of dependent claims 2-9.

Response to Argument (11) B)

I.B. Are claims 10 - 18 patentable under 35 U.S.C. 102 over Pavlovic et al. U.S. Patent No. 5,715,379?

Claim 10 and dependent claims 11 - 18 relate to a printing method comprising a plurality of steps. In the claimed printing method a step of examining a document to select a parsing process suitable for the document's printer description language (PDL) is continued while the document is being parsed for the purpose of examining the document for synchronization data. The appellants assert that this is a feature distinguishing the claimed printing method from prior art printing methods where the examination process terminates after a PDL has been identified for the document and before parsing is initiated. The appellants assert (Appellants' Brief, page 5) that to anticipate under 35 U.S.C. 102, "the reference must teach every aspect of the claimed invention, either explicitly or implicitly" MPEP 706.02(a) and that Pavlovic does not teach, explicitly or by implication, a printing method in which examination of the document for a PDL does not terminate prior to the initiation of parsing of the document.

The method of claim 10 parallels the print engine of claim 1 and the examiner's responses (Response to Argument, (11)B), pages 14-16) parallel the Response to Argument (11) A), above. The examiner repeats the rejection (pages 14-15) but offers no basis for the conclusion that Pavlovic discloses a step in which "(d) the examining step (b) continuing to examine the document for synchronization data." Likewise, the examiner offers no basis for concluding that restarting the PDL examination step of Pavlovic at an intermediate point in a document means the PDL determination process continues while the document is being parsed. By definition, restarting the examination process means that the process had been terminated earlier and nothing of record contradicts the assertion that, if terminated, the termination occurs before parsing is initiated. Further, the suggestion in Pavlovic that multiple documents can be simultaneously parsed (decomposed) does not suggest that while a document is being parsed it is also being examined for synchronization data. Finally, the desirability and

-5-

advantages of parallel operation of parsing facilities do not teach expressly or by implication that the document examination step continues during parsing.

The Examiner has rejected claim 18 under 35 U.S.C. 102 as anticipated by Pavlovic but admits in the Answer (page 21) that Pavlovic does not teach an element of the claimed print engine. The appellants submit that rejection for anticipation requires that the entirety of the claimed invention be found in a single prior art document and that rejection on the basis of 35 U.S.C. 102 is therefore improper.

The appellants submit that Pavlovic does not anticipate claims 10-18 because Pavlovic does not explicitly or implicitly teach a print engine including all of the limitations of independent claim 10 and, therefore, all the limitations of dependent claims 11-18.

Response to Arguments (11)C)

II.A. Are claims 1 - 8 patentable under 35 U.S.C. 102(b) over Steeves et al., U.S.
    Patent No. 5,075,874 (Steeves)?

In the Appeal Brief (page 7), the appellants asserted that claims 1-8 were patentable over Steeves because Steeves et al. do not explicitly or implicitly teach that the process manager 100 which calls the "appropriate" emulation module in response to the presence of data in the buffer continues to examine the data in the buffer to determine if the PDL has changed once it has identified the data's PDL.

In response, the examiner has repeated the rejection (Answer, page 17) including the examiner's conclusion that the "(e) the second process (process manager 100) not terminating prior to the selected third process initiating parsing of the document." The examiner refers to column 4, lines 37-42 of Steeves which discloses that the process manager "monitors the status of the buffers in RAM 68 and when it sees data in one of the buffers, it determines which emulation is the current one for the corresponding port, referring to the values stored in EEPROM 74 and calls the appropriate emulation module 104-112." The appellants submit that there is nothing in the referenced portion of Steeves suggesting that the process manager does not

-6-

terminate after calling the emulation module like all prior art PDL determination processes of record. The examiner further refers to column 4, lines 59-61 which discloses "when the emulation module has filled a page in the page buffer, or runs out of data, it notifies the process manager 100 that a page is ready to print." The examiner does not explain whether or how this supports the conclusion that the process manager does not terminate prior to document parsing. However, the appellants submit that reliance on the emulation module for notification that the buffer is empty indicates that the process manager has terminated like other prior art PDL determination processes and is not monitoring the buffer during parsing of the data.

The examiner also refers (Answer, page 18) to certain advantages of the system of Steeves (column 9, lines 12-17) but the appellants submit this irrelevant to the issue of anticipation by Steeves.

The appellants submit that Steeves does not anticipate claims 1-8 because Steeves does not explicitly or implicitly teach a print engine including all of the limitations of independent claim 1 and, therefore, all the limitations of dependent claims 2-8.

Response to Argument (11)D)

II.B. Are claims 10 - 17 patentable under 35 U.S.C. 102(b) over Steeves et al., U.S.
   Patent No. 5,075,874?

In the Appeal Brief (page 7-8), the appellants asserted that claims 10-17 were patentable over Steeves because there is no indication that Steeves includes a step wherein the examination process of step (b) is applied to search for synchronization data while the document is being parsed. In response, the examiner has recited the rejection including the examiner's conclusion "(d) the examining of step (b) continuing to examine the document for synchronization data while the parsing of step (c). The examiner again refers to Steeves at column 4, lines 37-42, column 9, lines 12-17, and column 4, lines 59-61 and the appellants reply, for the reasons stated above, that nothing in Steeves including the cited portions, supports the conclusion that the

PDL determination step performed by the process manager does not terminate prior to the initiation of parsing. Further, the appellants submit that the reliance on the emulation module to notify the process manager that the buffer is empty indicates that the process manager has been terminated and does not monitor the buffer during parsing of the document.

The appellants submit that Steeves does not anticipate claims 10-17 because Steeves does not explicitly or implicitly teach a printing method including all of the limitations of independent claim 10 and, therefore, all of the limitations of dependent claims 11-17.

Response to Arguments (11)E) pages 20-22

III. Are claims 9 and 18 patentable under 35 U.S.C. 103(a) over Pavlovic et al. or Steeves et al. in view of Nihara et al., U.S. Patent 5,854,940?
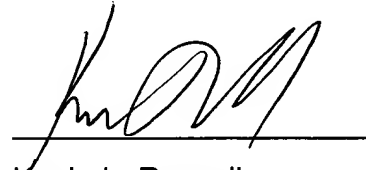
In the Appeal Brief (page 8) the appellants observed that claims 9 and 18 are dependent claims and if claims 1 and 10 were not anticipated by Pavlovic et al. or Steeves et al., claims 9 and 18 would not be obvious from the combination of Pavlovic or Steeves and Niihara (U.S. Patent 5,854,940). Appellants submit that the examiner has conceded this issue in the Answer (page 21) by affirming that Niihara does not teach a PDL determination process not terminating prior to the initiation of parsing, The appellants submit that claims 9-18 are not obvious because, for reasons stated above, independent claims 1 and 10 are not anticipated by Pavlovic or Steeves.

Conclusion

The appellants respectfully submit that the examiner's final rejection of claims 1 - 18 for anticipation under 35 U.S.C. 102 and claims 9 and 18 under

-8-

35 U.S.C. 103 should be reversed and, consequently, the claims 1 - 18 should be allowed.

Respectfully submitted,

Kevin L. Russell
Reg. No. 38,292
Attorney for Applicants